

What is Claimed Is:

1. A one-part organopolysiloxane gel composition comprising:

(A) 100 parts by weight of an organopolysiloxane comprising from 80.0 to 97.0 mol% of $R(CH_3)SiO$ units, from 1.0 to 10.0 mol% of $RSiO_{1.5}$ units, from 0.1 to 4.0 mol% of $(CH_3)_2(CH_2=CH)SiO_{0.5}$ units, and from 0.5 to 10 mol% of $(CH_3)_3SiO_{0.5}$ units

[wherein, a total of said units is 100 mol%, and in each unit formula representing said units, R represents a methyl group, a phenyl group, or a group represented by a formula $R_fCH_2CH_2-$ (wherein R_f is a perfluoroalkyl group that contains or does not contain an ether linkage-forming oxygen atom within a chain)],

in which a plurality of said R groups within a single molecule are either identical or different;

(B) an organohydrogenpolysiloxane having at least two units represented by a formula $H(R^1)_2SiO_{0.5}$ within each molecule

[wherein, each R^1 represents, independently, an unsubstituted or substituted monovalent hydrocarbon group other than an alkenyl group],

in sufficient quantity that a number of hydrogen atoms bonded to silicon atoms within this component is within a range from 0.5 to 4.0 atoms for each vinyl group within said organopolysiloxane of said component (A);

(C) an effective quantity of a platinum based catalyst;

(D) a phosphite triester in sufficient quantity to provide at least 2 equivalents relative to platinum metal atoms within said component (C); and

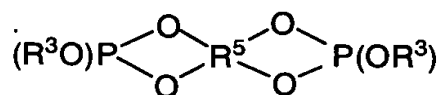
(E) an organic peroxide in sufficient quantity to provide at least 2 equivalents relative to said component (D).

2. The composition according to claim 1, wherein said phosphite triester is a compound represented by a general formula:



[wherein, each R^2 represents, independently, at least one group selected from the group consisting of unsubstituted and substituted monovalent hydrocarbon groups, and groups of a formula $-R^4-[-O-P(OR^3)_2]_x$ (wherein R^3 are each independently an unsubstituted or substituted monovalent hydrocarbon group, x is an integer of 1 to 3, and R^4 is a bivalent, trivalent or tetravalent hydrocarbon group of 2 to 20 carbon atoms that contains or does

not contain an ether linkage-forming oxygen atom within the chain)], or a compound represented by a general formula:



[wherein R^3 are as defined above, and R^5 is a tetravalent hydrocarbon group of 1 to 20 carbon atoms that contains or does not contain an ether linkage-forming oxygen atom within the chain)].

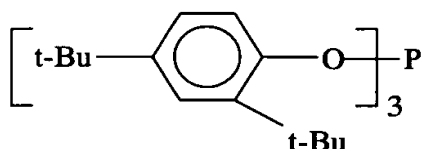
3. The composition according to claim 1, wherein a quantity of said $RSiO_{1.5}$ units within said component (A) is from 1.5 to 10.0 mol%.

4. The composition according to claim 1, wherein a viscosity at 25°C of said component (A) is within a range from 300 to 10,000 mPa·s.

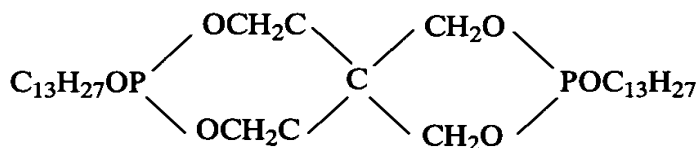
5. The composition according to claim 1, wherein a viscosity at 25°C of said component (B) is within a range from 0.5 to 500 mPa·s.

6. The composition according to claim 1, wherein said component (B) is a dimethylpolysiloxane with both molecular chain terminals terminated with dimethylhydrogensiloxy groups.

7. The composition according to claim 1, wherein said component (D) is triethyl phosphite: $(EtO)_3P$, tris(2-ethylhexyl) phosphite: $[MeC_3H_6CH(Et)CH_2O]_3P$, trioctyl phosphite: $[Me(CH_2)_7O]_3P$, triphenyl phosphite: $(PhO)_3P$, diphenylmono(2-ethylhexyl) phosphite: $(PhO)_2(MeC_3H_6CH(Et)CH_2O)P$, tris(2,4-di-tert-butylphenyl) phosphite:



tetraphenyldipropylene glycol diphosphite: $(PhO)_2PO-[CH(Me)-CH_2O]_2-P(OPh)_2$, tetraphenyltetra(tridecyl)pentaerythritol tetraphosphite: $[(PhO)(C_{13}H_{27}O)P-OCH_2]_4C$, tetra(tridecyl)-4,4'-isopropylidenediphenyl diphosphite: $(C_{13}H_{27}O)_2PO-Ph-C(Me)_2-Ph-OP(OC_{13}H_{27})_2$, bis(tridecyl)pentaerythritol diphosphite:



(wherein in each of the above formulas, Me, Et, Bu, and Ph represent a methyl group, an ethyl group, a butyl group, and a phenyl group or phenylene group, respectively), or a mixture of two or more thereof.

8. The composition according to claim 1, wherein said component (E) is a ketone peroxide, a peroxy ketal, a hydroperoxide, a dialkyl peroxide, a diacyl peroxide, a peroxycarbonate, a peroxy ester, or a combination of two or more thereof.

9. The composition according to claim 1, wherein said component (E) is methyl ethyl ketone peroxide, cyclohexanone peroxide, methyl acetoacetate peroxide, acetylacetone peroxide, 1,1-bis(t-butylperoxy)-3,3,5-trimethylcyclohexane, 2,2-bis(t-butylperoxy)butane, 1,1,3,3-tetramethylbutyl hydroperoxide, cumene hydroperoxide, t-butyl hydroperoxide, 2,5-dimethyl-2,5-bis(t-butylperoxy)hexane, di-t-butyl peroxide, 3,5,5-trimethylhexanoyl peroxide, m-toluoyl peroxide, di-isopropyl peroxydicarbonate, di-2-ethylhexyl peroxydicarbonate, t-butylperoxy 3,5,5-trimethylhexanoate, t-butylperoxy isopropylmonocarbonate, t-butylperoxy 2-ethylhexylmonocarbonate, t-butylperoxy benzoate, or a combination of two or more thereof.

10. The composition according to claim 1, further comprising a dimethylpolysiloxane in which one molecular chain terminal is terminated with a trimethylsiloxy group, and another terminal is terminated with a dimethylhydrogensiloxy group.

11. The composition according to claim 1, further comprising a copolymer of dimethylsiloxane and diphenylsiloxane with both molecular chain terminals terminated with trimethylsiloxy groups.

12. The composition according to claim 1, further comprising a hydrophobic silica that has been surface treated using hexamethyldisilazane and comprises trimethylsilyl groups at said surface.